REMARKS

With this amendment claim 43 has been canceled and claims 1-25, 27-38, 40-42, 44-58, 60-74, 77-86, 88-92 have been amended to correct antecedent basis, grammar, and/or more particularly recite Applicants' invention. The first paragraph of the specification has been amended to recite the application serial numbers of related applications referenced in the original draft of the first paragraph. No new matter has been added by way of these amendments. Thus, upon entry of the present amendment, claims 1-42, and 44-92 will be pending.

The Examiner has required election of a species from one of one of 44 species enumerated in the June 14, 2004 Office Action. In response, Applicants hereby elect species XVI (claim 33, "[t]he method of claim 1, wherein performing said algorithm includes applying transport currents through the multi-terminal junction"). Claims 1-42 and 44-49 are readable upon the elected species. Claim 1 is generic to the elected species.

Applicants respectfully request that the above-mentioned amendments and remarks be entered and made of record in the file history of the subject application.

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Respectfully submitted,

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